FIELD OF THE INVENTION

[0001] This invention is directed to microbial adherence inhibitor, in the form of fowl egg antibodies, for substantially preventing the attachment or adherence of colony-forming immunogens or haptens in the rumen and intestinal tract of host food animals, to the method of producing such adherence inhibitors, and to the methods of using such inhibitors to: (1) promote the growth of food animals by improving feed conversion rates by decreasing the waste of dietary protein caused by the presence of certain colony-forming protein-wasting organisms in food animals, and (2) to substantially reduce or eliminate the incidence of illnesses caused by the presence of certain illness-causing colony-forming immunogens or haptens in meat from food animals, which are not themselves subjected to the targeted illness, and in other food stuffs.

BACKGROUND OF THE INVENTION

[0002] Common bacterial immunogens which cause dramatic decreases in an animal's ability to utilize dietary protein include but are not limited to *Peptostreptococcus anaerobius*, *Clostridium aminophilum*, and *Clostridium sticklandii*. According to Russell (USDA-ARS, May 1993) these organisms, and others disclosed therein, have been collectively responsible for wasting up to 25 percent of the protein in cattle diets. This is a loss of as much as $25 billion annually to cattle producers and is especially apparent in "grazing animals which are often deficient in protein, even though their protein intake appears to be adequate". As the host consumes protein in the diet, these deleterious organisms wastefully degrade the protein to ammonia which is converted to urea by the liver and kidneys and thus lost to the host when excreted as urine. These deleterious organisms also compete with beneficial organisms which the host needs for the efficient utilization of ammonia. In addition, they need other beneficial organisms in the rumen